

14. DESCRIPTION OF AMENDMENT (Con't)

a. SECTION C – DESCRIPTION/SPECIFICATION/STATEMENT OF WORK: Delete pages C-46 and C-84 in their entirety and substitute with revised pages annotated Amendment No. 0009 attached hereto.

b. Please indicate receipt of this amendment on Standard Form 33 (SOLICITATION, OFFER AND AWARD) as Amendment No. 0009. Failure to acknowledge all amendments may be cause for rejection of the offer.

SECTION SF 30 – BLOCK 14 CONTINUATION PAGE

INSTRUCTIONS FOR USING AMENDED PAGES

1. Pages provided by amendment are to be substituted into the original Request For Proposal (RFP) document. Where an existing page number is provided as part of the amendment, the amended page is to be inserted and the original page with the same number discarded. Where a new page is provided, such as C-XX-A, it is to be added to the RFP document. Pages not addressed by amendment remain unaffected.

2. The amended pages use a Redline/Strikeout technique to show changes from the last issue of the page and simplify the contractor's effort in locating the changes. The technique works as follows:

a. Text that is *added* appears as underlined, and is also indicated by margin revision marks. This text must be considered by the contractor in preparing a bid.

b. Text that is *deleted* appears as ~~strikeout, and is also indicated by margin revision marks~~. Text so designated has been deleted and only appears to allow contractors to quickly determine "what has been deleted". This text should be disregarded by the contractor in preparing a bid.

c. Text that does not have the above appearance has *not* been altered.

d. In some cases, an alphabetical character has been added to a page number, to create a new page that allows room for a replacement page or "overflow" text.

INDEX OF CHANGES

<u>PAGES</u>	<u>CHANGED BY</u>	<u>REV I.D. NO</u>
INSTRUCTIONS/INDEX-1	Amendment 0009	22 July 2003
C-46	Amendment 0009	22 July 2003
C-84	Amendment 0009	22 July 2003

As a minimum, the following alarms shall be included in each panel:

- Engine overspeed.
- Low lube oil pressure.
- High jacket water temperature.
- Low gear oil pressure.

C. REDUCTION GEAR

The dredge pump shall be driven through a marine reduction gear having a minimum service factor of 1.5 for the rated hp of the engine. The gear shall be provided with the following:

- Dynamically balanced, surface hardened and precision ground, single or double helical gears on alloy steel shafts mounted on tapered roller bearings.
- Bearings with a 30,000 hour B-10 life (minimum).
- A rigid, welded, stress-relieved housing with bolted inspection plates and cleanout covers.
- Alloy steel forged gears.
- A complete lubrication system.

The gear shall be equipped with a motor driven jacking gear capable of rotating the entire dredge pump drive to enable dismantling of the pump impeller. Arrangement for locking the shaft shall also be provided. An interlock shall be provided so that dredge pump starter cannot be energized simultaneously when either the jacking gear or the shaft lock is engaged.

D. ALIGNMENT

The dredge pump drive system shall be aligned when the vessel is afloat at its operating draft. All alignment shall be performed in the presence of the COR or his designated representative and in accordance with the equipment manufacturer recommendations.

E. BOOSTER PUMP ENGINE

The booster pump shall be self-contained and mounted together with its reduction gear, fuel tank, and engine with radiator cooling on a skid for mounting on a remote barge or shore location. The booster pump and drive installation shall be as identical to the in-hull pump and drive as practicable. Monitoring and controls for the booster pump shall be via radio telemetry control so that the booster pump can be monitored and controlled from the dredge control room.

C733 ELECTRICAL POWER PLANTA. DIESEL GENERATOR SET REQUIREMENTS

The diesel generator set(s) shall be a 4 stroke-cycle marine type, meeting ABS requirements. The diesel generator(s) shall have a continuous rating at 0.8 power factor at 60 Hz ~~and 1800 rpm~~. The generator(s) shall be set up to supply 480 volt AC, 3-phase, 3-wire, ungrounded, 60 Hz electrical power.

Each generator supplied shall be equipped with an amortisseur winding and shall be capable of delivering 110 percent load for two hours without exceeding permissible limits of temperature rise. Each generator, along with its regulation and excitation systems shall be capable of supporting overload conditions as well as maintaining short circuit currents of such magnitude and duration as required to properly actuate selective tripping of downstream protective devices.

Each voltage regulator supplied shall be a solid-state volts-per-hertz voltage regulator and shall be capable of automatically maintaining constant rated generator voltage throughout the load range of the generator(s). Each voltage regulator supplied shall be capable of maintaining steady state regulation within 1 percent of rated voltage from no load condition to 110 percent rated load condition and shall include a voltage adjusting rheostat with a plus and minus 10 percent adjustment range.

The voltage dip on the generator(s) shall not exceed 25 percent while starting the largest motor on the vessel across-the-line with the main bus load at 30 percent capacity.